SMALL PURCHASE (UNDER $2500.00) PROCESSING MODEL FOR NAVAL SUPPLY CENTERS

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THESIS

SMALL PURCHASE (UNDER $2500.00) PROCESSING MODEL FOR NAVAL SUPPLY CENTERS

by

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by

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ACRONYMS AND ABBREVIATIONS USED

ASPR	Armed Services Procurement Regulations
COMNAVSUPSYSCOM	Commander, Naval Supply Systems Command
CSD	Customer Services Division
DLSC	Defense Logistics Supply Center
DPD	Data Processing Department
DPS	Document Preparation Section
FMSO	Fleet Material Support Office
FSN	Federal Stock Number
GSA	General Services Administration
ICD	Inventory Control Department
ICP	Inventory Control Point
IG	Issue Group
MATCONOFF	Material Control Officer
MISR	Master Inventory Stock Record
NAVSUP	Naval Supply Systems Command
NC	Not Carried
NIS	Not In Stock
NRFC	Navy Regional Finance Center
NRPO	Navy Regional Procurement Office
NSC	Naval Supply Center
OA	Operations Analysis
PD	Purchase Division
RPB	Requisition Processing Branch
RSF	Requisition Status File
UADPS	Uniform Automated Data Processing System
UIC	Unit Identification Code

I. INTRODUCTION

The purpose of this thesis is to present ideas that purport to significantly reduce average small purchase response times at Naval Supply Centers.

In mid-1973, the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM), Rear Admiral W. R. Dowd, Jr., Supply Corps, United States Navy, began a concentrated effort to reduce supply response time throughout the Navy Establishment.[1] Admiral Dowd directed in August 1973 that a new and separate department be established in the Navy Fleet Material Support Office (FMSO) to "a. Develop, implement and maintain a response time measuring system that encompasses the function of the entire supply system" and "b. Evaluate the performance of the supply system, detect weaknesses and propose least cost remedial action to COMNAVSUPSYSCOM" (1). Operations analysts and persons with related talents were to core staff the new department. Within two months of the establishment of the Supply Systems Performance Evaluation Department at FMSO, COMNAVSUPSYSCOM further directed that operations analysts be placed in all of the Naval Supply Center (NSC's). These analysts were assigned to assist each

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[1]Supply response time is defined here as the period of time starting with a request to a requisitioning authority (i.e., a ship's Supply Officer, a squadron Storekeeper) and ending with the receipt of material by the end user.

of the NSC's to investigate, collect and provide pertinent data to the new department at FMSO.

Response time, as defined herein, ranges from hours, in the case where the user's activity can readily provide the required material from locally held stocks; to months, in the case where private industry is called upon to manufacture the item required. Hence, response time spans as few as one echelon of supply, but may span as many as four or more dependent upon the material availability. As used here, the possible echelons for a Navy ship at sea might include first, the ship's own storeroom stock; second, that of ships traveling in company as coordinated by a Material Control Officer (MATCONOFF); third, stock carried by normal replenishment ships; fourth, stock carried by an NSC ashore and so on.

This thesis is specifically concerned with procurement response time at a Naval Supply Center. Center response time is defined as the time from the initial receipt of a requisition by the Center until the material request is fulfilled and released for delivery. (This definition excludes the cases where a requisition is not fulfilled and must be forwarded to another echelon of supply for possible fulfillment.)

Further, this thesis is concerned with only one aspect of a NSC's response time: specifically that associated with the processing of a requisition through the Center until it becomes a procurement action under the responsibility of the

Purchase Division of the Inventory Control Department (ICD). Hence, procurement response time is specifically the time from the receipt of a requisition (purchase request) to when a contract is consumated with a vendor.

The Purchase Division executes the buying of all "small purchases" for the NSC. Small purchases are those contracts whose aggregate value, does not exceed $2500.00, except in the case where the material or service can be obtained from a federal or state government source. Small purchases accounted for approximately 4.5% of the investigated NSC's average monthly requisition input of almost 215,000 documents.

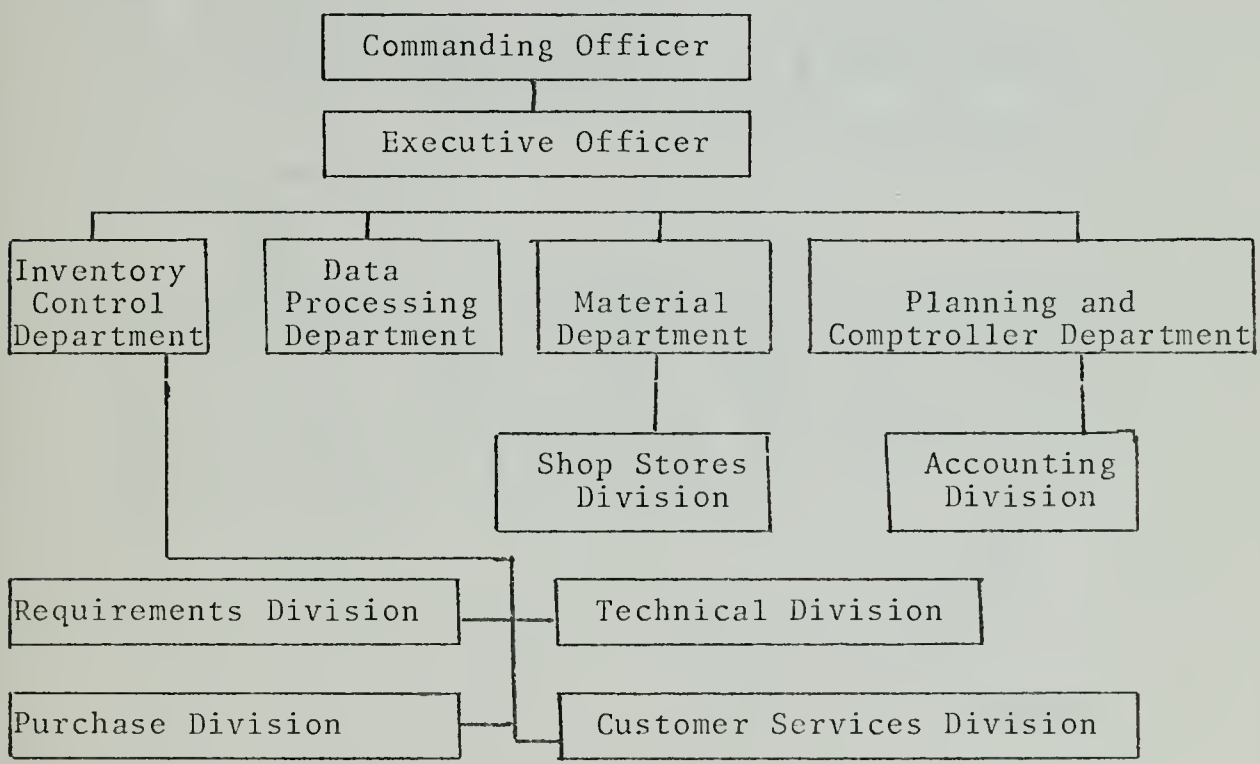
All data collected and referred to herein was obtained during the author's "Experience Tour", a six-week interruption of the otherwise purely academic pursuits of the Operations Analysis (OA) curriculum of the Naval Postgraduate School, Monterey, California. The experience tour provides the OA student with a six-week opportunity to apply what he has learned to-date while simultaneously assisting a field activity in government or in private industry. In addition, the student has the opportunity to identify a possible thesis topic associated with his tour at the field activity. The data for this thesis was primarily gathered during the period from 4 November 1973 through 14 December 1973 at the Naval Supply Center, Oakland, California.

The above information serves as a general setting for the conditions in existence prior to the beginning of this

experience tour. The next chapter develops a detailed description of the pertinent conditions found at the NSC level. The procedures utilized by the analyst, data collected, analysis and conclusions will be presented in Chapter III. In Chapter IV a summary of the resulting recommendations will be provided. Since the Center decided to act upon several of the recommendations, Chapter V of this thesis will include a partial status of the Center's purchase process resulting from adoption of those recommendations.

II. BACKGROUND

The administrative chain of command of a Naval Supply Center is defined in The Naval Supply Systems Command Manual, Volume I.[2] The elements of that organization that are relevant to the small purchase process are illustrated below in Figure 1.



NAVAL SUPPLY CENTER

Figure 1. Administrative Organization for Small Purchase Process.

The processing of requisitions that result in a small purchase action flow primarily through the above organization in one of three possible paths (Figure 2). Virtually all

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[2] NAVSUP Manual, Vol. I, paragraph 11063.

requests for material are introduced into the process through the Customer Services Division and the Shop Stores Division.

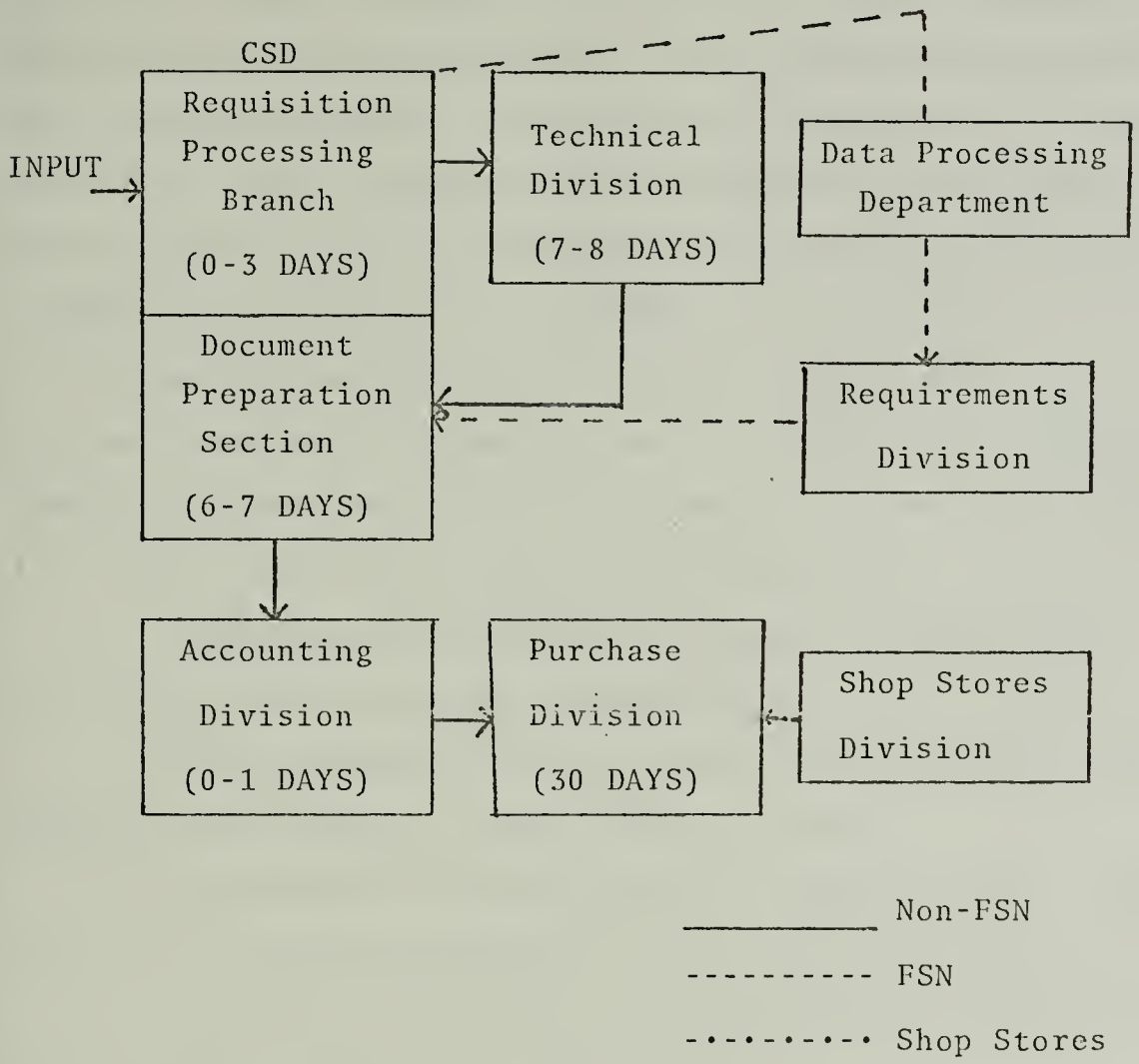


Figure 2. Processing Paths for "Small Purchase" Requisitions.

The solid line in Figure 2 represents the normal processing path of a requisition received by the NSC that does not contain a Federal Stock Number (FSN). The average processing times of each unit are included for this path. The evenly-dashed line indicates the normal processing path of a requisition that initially contains an FSN, but because of

other information contained on the requisition and/or information contained on the Master Inventory Stock Record (MISR) for the material requested (i.e., not in stock, NIS; local procurement authorized/directed), the requisition joins the small purchase process. The third path illustrated is the most direct, but the Shop Stores and the FSN input to the Purchase Division is relatively minor (approximately 9%) in volume, thus, will not be considered in this thesis.

During the period of July through October 1973, the average procurement response time was 45 days. NSC management considered this an excessive amount of time. The factors that contributed to this total time were:

1. The prime work week being limited to essentially forty (40) hours per seven calendar days;

2. the complexity and completeness of the supply system design insuring that a given "buy" is proper;

3. procedures to insure that all information for a good contract be provided the buyer in the Purchase Division;

4. procedures to insure that the material requested is not available from locally held stocks;

5. procedures to insure that the proper fund citation is applied to the contract for eventual billing; and

6. the inherent delay experienced in waiting for a prospective contractor to make an accepted quote.

Center management charged this analyst to investigate the small purchase process and make recommendations to reduce the average procurement response time. There were no stated

constraints attached to the problem assigned and the appropriate managers were requested to assist the analyst in every and any way possible. Consequently access to personnel, historical files and records and other information were made readily available to the analyst.

The six-week experience tour, however, became an implied constraint, limiting the degree of detail the analyst could pursue and yet complete the task before the tour was concluded. Accordingly, the plan adopted included:

1. A review of the purchase processing administration organization;

2. a review of Center and small purchase processing input and throughput statistics; and

3. a detailed review of all the actual processing steps and procedures.

A. INPUT AND THROUGHPUT DATA

The NSC's monthly reports to NAVSUPSYSCOM and supporting internal reports of the Center for the period of July through October 1973 were used to obtain the data provided in this section (2.,3.).

The key information provided by Figure 3 is that only 6.3% of the Center's requisition input goes directly to the Technical Division and as such constitutes the amount of the NSC's non-FSN input for the period shown. This thesis can now be kept in context since it has now been identified to concern a maximum of approximately 6.3% of the Center's requisition input. Figure 3 also shows that the total of

the Purchase Division's efforts affect approximately 4.5% of the Center's total requisition input population. In terms of number of requisitions, however, the data in the four month sample can be projected to an annual volume of about 120,000 requisitions. This is the workload volume that this thesis will analyze and comment on.

REQUISITION

Input Statistics

July - October 1973

TOTAL NSC INPUT	MANUAL INPUT	INPUT TO TECHNICAL DIVISION	INPUT TO PURCHASE DIVISION	
194.047 (100%)	55,663 (28.1%)	12,375 (6.4%)	7,514 (3.87%)	JULY
203,632 (100%)	57,201 (28.1%)	14,789 (7.3%)	12,405 (6.09%)	AUGUST
267,928 (100%)	51,684 (19.3%)	13,588 (5.1%)	8,548 (3.19%)	SEPTEMBER
193,087 (100%)	50,177 (26.0%)	13,181 (6.8%)	10,297 (5.33%)	OCTOBER
858,694 (100%)	214,725 (25.0%)	53,933 (6.3%)	38,764 (4.51%)	GRAND TOTAL

Figure 3.

Center records further showed that for the period of July through October 1973, seventy percent (70%) of the Technical Division's output accounted for approximately 91.5% of the Purchase Division's input.

In terms of throughput, the Centers' purchase process can be viewed as being comprised of two phases: all those actions taken and procedures executed prior to the receipt of a requisition by the Purchase Division comprise the pre-purchase phase, while the remainder of the process is referred to as the purchasing phase. At the time of data collection, the Center was experiencing an average of 15 to 18 days for a requisition to pass through the pre-purchase phase and an average of 27 to 30 days to pass completely through the purchase phase for a total average purchase processing cycle time of 45 days (see Figure 4).

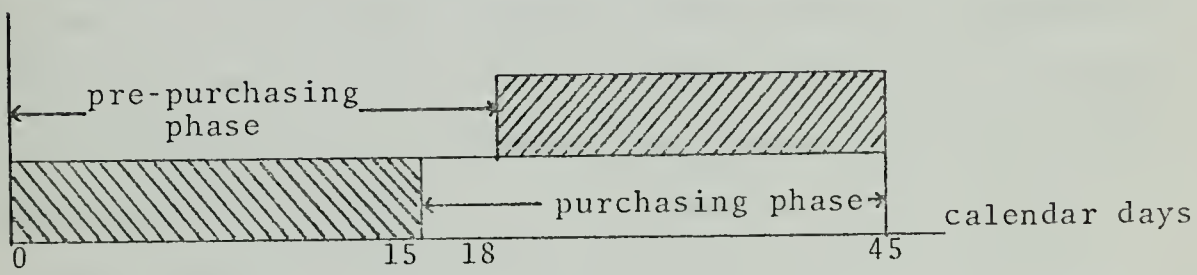


Figure 4. Average Purchase Processing Cycle Time.

The data presented thus far, shows that the Center's purchase processing cycle is primarily comprised of five organizational units of Division size or less (CSD - two units, initial screening and pre-purchase screening; Technical Division; Financial Accounting Division of the Comptroller Department; and the Purchase Division) that process approximately 15,000 non-standard requisitions a month, 10,000 of which end up as a local purchase action. And it takes an average of 45 calendar days to pass these 10,000 requisitions entirely through the cycle.

In an effort to identify the specific factors contributing to the length of the purchase processing cycle, it became apparent that a detailed examination of the procedures of each processing unit should be performed. The pertinent procedures examined in each unit are presented in the next section.

B. PURCHASE PROCESSING CYCLE PROCEDURES

1. Customer Services Division -- Requisition Processing Branch (RPB)

This branch is responsible to (in part) ".. screen, determine supply action and process non-standard requisitions.." The branch is further charged with the responsibility to perform this action on all requisitions, priority 1 through 15 and ".. to control high priority requisitions to the extent required.." and to "Monitor high priority supply operations across Departmental lines during swing and graveyard shifts, seven days a week (4).

As it affects the purchase processing cycle, this responsibility breaks down to the following actions:

a. Receive all requisitions and apply date-time stamp;

b. identify non-standard requisitions;

c. attach "Purchase Information Sheet" to requisition, color coded by Issue Group (see Appendix A.).

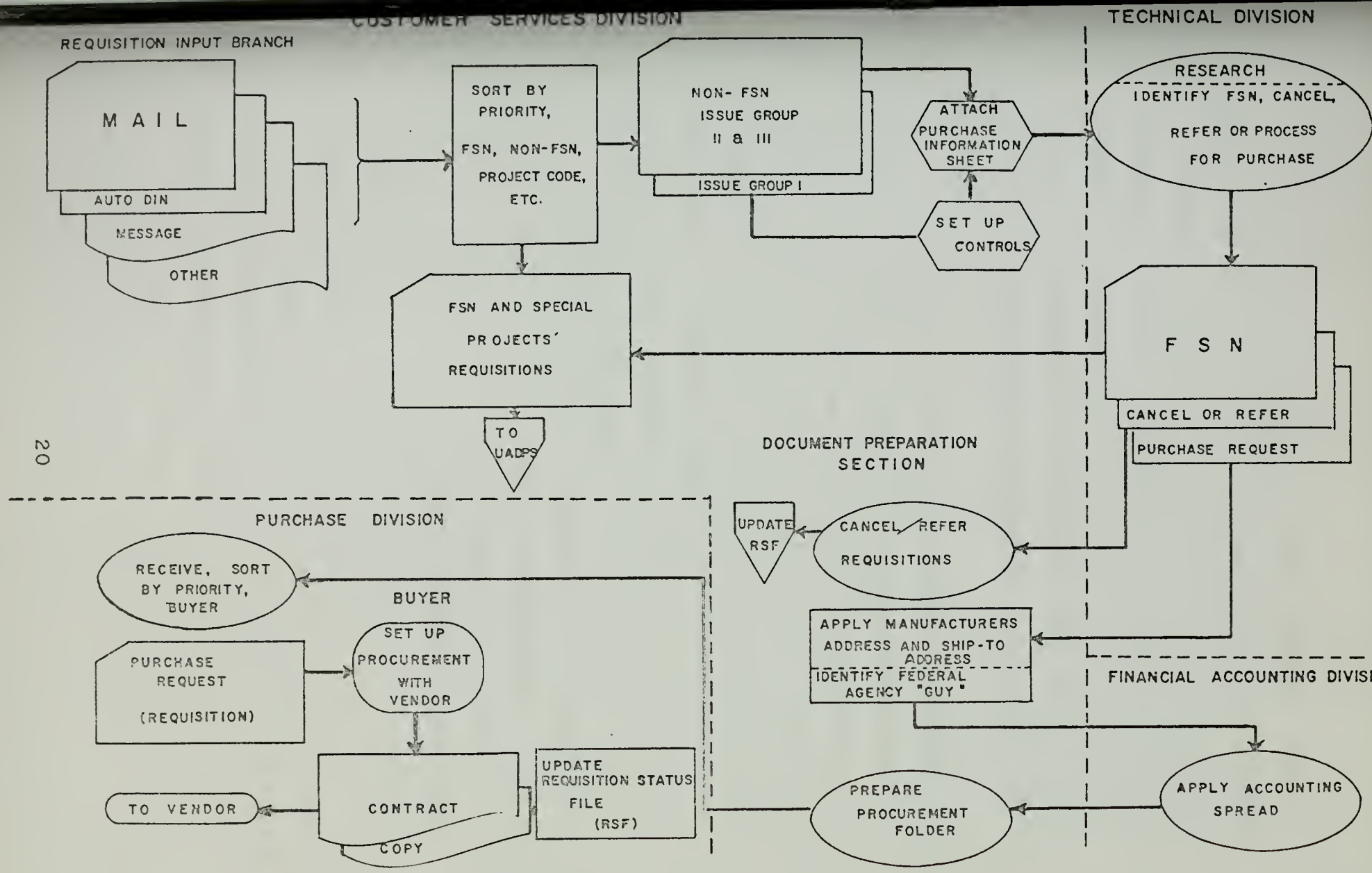
d. Forward all requisitions to Technical Division with Issue Group I (requisitions priority 1 through 3) proceeding to Technical Division via the Priority Control Section of the Requisition Processing Branch.

Virtually all requisitions processed through the Center are received by the Customer Services Division (CSD). These requisitions are transmitted to the Center by various means, such as mail, message, autodin and are also hand-carried (called bearer-requisitions). Regardless of the means transmitted, all requisition input if funneled through CSD for initial placement into the Centers' supply process.

CSD personnel initially screen this input and based on predefined criteria, determine specifically which process and at which point in that process the requisition should enter. The completeness of the requisition, the requisition's priority, the presence or absence of an FSN, the project code and other information provided are all elements that allow CSD personnel to make the proper determination.

Approximately ninety-two (92) percent of the Purchase Divisions' input involves requisitions without an FSN; the processing of this group of requisitions is depicted in Figure 5.

These actions are the major ones performed on purchase requisitions prior to receipt by the Technical Division. Every non-standard requisition does not receive the exact same treatment, but the exceptions to the process outlined here are not considered pertinent to the proper analysis of these procedures. It is only important to know that every non-standard requisition does proceed through the four steps identified above in an almost identical manner.



FLOW OF REQUISITIONS THROUGH NSC PURCHASE PROCESSING CYCLE

Figure 5

The Purchase Information Sheet identified above is a local form used by Center personnel to record data that will eventually be placed in the contract. Included on the form are data that supplement the original requisition information in describing the requirement to the buyer. This data is provided by various personnel in the performance of their normal tasks throughout the purchase processing cycle.

Referring back to the procedures of the Requisition Processing Branch, a requisition remains in Customer Services from less than one eight-hour day to three days before it arrives in the Technical Division. Physically the documents are placed in a delivery box (out-basket) and periodically a messenger empties the box and walks the documents to the Technical Division.

2. Technical Division

Requisitions are forwarded to the Technical Division for two primary purposes; first, to associate an FSN with a material requirement or in the event an FSN cannot be found, provide sufficient information to the buyer in Purchase Division to make an efficient and proper buy. The procedures performed in Technical include:

a. Sort and screen for obvious purchase actions not requiring technical research (i.e., magazine subscriptions, eyeglass prescriptions, requests for services, etc.);

b. Process remainder against Defense Logistics Supply Center (DLSC) microfische of 2.5 million part numbers to attempt to obtain a FSN;

c. If no FSN is found, sort requisitions into commodity groups comparable to specialization abilities of technicians and manner in which the Technical Division is organized (i.e., electronics, ships parts, ordinance, etc.);

d. Research appropriate publications and catalogs.

Seventy (70) percent of the non-FSN requisitions processed by the Technical Division never get an FSN applied and are not cancelled or referred to another supply echelon. Rather they are forwarded to CSD for further processing prior to being sent to the Purchase Division.

All requisitions processed for technical review are subjected to the DLSC screen. The pertinent statistics concerning this technical review are shown in Figure 6. Table A relates actions to total number of requisitions received by the NSC during the period July through October 1973. Table B relates the same actions to Technical Division's input for the same period. Table C breaks down those non-standard requisitions provided an FSN from the DLSC screen from the total of such requisitions.

As can be seen from Figure 6 (Table B), 94.3% of all requisitions received by the Technical Division use the DLSC Screen, but it is successful in providing an FSN only 7.1% of the time.[3] NSC Oakland anticipated adding another 2.5 million part numbers, provided by FMSC, to the DLSC screen in an effort to make it more effective. Also from

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[3] 100% - 5.7% = 94.3%.

TABLE A.

Number	Category	Percent (%)
858,694	Received by NSC	100.0
53,933	Received by Technical Division	6.3
9,171	Provided FSN (Total)	1.0
3,093	Sent Direct to Purchase Division (DLSC Screen)	.3
649	Provided FSN (DLSC Screen)	.07

TABLE B.

53,933	Received by Technical Division	100.0
9,171	Provided FSN (Total)	17.0
3,093	Sent Direct to Purchase Division (DLSC Screen)	5.7
649	Provided FSN (DLSC Screen)	1.2

TABLE C.

9,171	Provided FSN (Total)	100.0
649	Provided FSN (DLSC Screen)	7.1

Figure 6. Processing Statistics of Technical Division 1 July-30 October 1973.

Figure 6 (Table B) above, only 17% of all the requisitions received by the Technical Division eventually are assigned an FSN; the remaining requisitions are forwarded to Purchase Division or referred to another supply echelon or cancelled due to lack of or conflicting data.

During the period under study, the average processing time for requisitions to go through the Technical Division was approximately seven to eight (7-8) calendar days.

Category	%
FSN	15.7
Purchase	67.2
Pass/Refer	12.3
Cancel	4.8
	100.0

Figure 7. *Requisition Output of Technical Division 1 July - 30 October 1973.

*Difference in percentages between Figures 6 and 7 are accounted for only by the fact that data used for each figure was derived from different management and workload reports. The differences in themselves, are considered insignificant.

3. Customer Services Division - Document Preparation Section (DPS)

This section receives all of Technical Division's output except those requisitions which have been identified with an FSN. The processing required to cancel or refer the appropriate requisitions is accomplished here. All of the other requisitions processed in this section are those received from Technical Division for which no FSN has been found and hence are to be processed as a purchase action. The requisition and the attached Purchase Information Sheet can now be officially classified as a purchase request.

The major actions performed by the Document Preparation Section include:

a. Establishment of a procurement folder for each requisition (more than one requisition is included in a

folder if they are sufficiently similar to the first requisition; i.e., for exact same material from same manufacturer, or similar item made by same manufacturer, etc.);

b. Providing an in-the-clear (not coded) address for the ship-to destination of the material, for inclusion on the contract;

c. Providing an in-the-clear address of the manufacturer or other source of the material;

d. Processing in a like manner those requisitions initially received by the NSC with an FSN but for which the MISR has directed local procurement;

e. Screening of each material requirement against "Federal Schedules" to insure item cannot be obtained from the General Services Administration (GSA) or any other designated federal or state agency. Clerks check estimated cost at this point and if the requisition cost exceeds $2500.00 and cannot be purchased from an activity on the federal schedule it is forwarded to the Navy Regional Procurement Office (NRPO);

f. Forwarding of the requisition to the Financial Editors (members of the Planning and Comptroller Department, but physically co-located with this section) for action and upon receipt from the editors, forwarding the requisition (procurement folder) to the Purchase Division.

4. Accounting Division - Financial Inventory and Edit Section

Two members from this section are co-located in CSD on a rotating basis for the purpose of providing a full

in-the-clear accounting spread (i.e., appropriation, subhead, object code, etc.) on the Purchase Information Sheet for eventual inclusion in the contract. The requisition is edited for financial accuracy and consistancy and items on the requisition such as the bill-to-activity, signal code, project code, material cognizance are used to ensure that the proper activity and proper funds to be charged for the materials requested are cited in the contract.

The average time for a requisition to proceed through both the Document Preparation Section and the Financial Inventory and Edit Section was approximately seven to eight (7-8) days. With the final action completed, the requisition is forwarded to the Purchase Division and, after being receipted for and sorted by priority and material type, is forwarded to the appropriate buyer for procurement action.

5. Purchase Division (PD)

The procurement folders are received and logged in and segregated primarily by Issue Group and commodity type so that they may be forwarded to the appropriate buyer. The buyer, upon receipt of the folder then begins procurement action. The average time to consumate a contract was approximately 30 days.

III. FINDINGS AND ANALYSIS

Several areas within the purchase processing cycle yielded indications that improvements could be made in response time. Each of these areas will be discussed with conclusions and recommendations provided in this chapter.

This chapter is divided into three sections. Section A deals only with the organizational aspects of the Centers' purchase process. Section B addresses problems found in specific procedures and processing techniques. (Some of the items discussed in these first two sections indicated the need to collect data from completed purchase orders.) Section B also presents an analysis of these data. The final section presents problem areas that warrant further investigation. Each of the first two sections is complete in that it identifies the problem, presents the analysis and conclusions reached and discusses proposed or alternate solutions.

A. PURCHASE CYCLE ORGANIZATION

The findings and analysis that affect the physical processing organization of the purchasing cycle are presented here. These include proposed changes in the administrative organization of the Inventory Control Department as well as changing the sequence of various procedures.

1. Major Organizational Change

A purchase requisition normally flows through at least three different Divisions of the Inventory Control

Department; the Financial Accounting Division of the Comptroller Department, and may also be processed by the Data Processing Department (DPD). This processing flow involves two separate sections of CSD and two other ICD Divisions, Technical and Purchase. Except for the Commanding Officer and the ICD Director, no one person controls or is responsible for the whole purchase processing cycle within the NSC. One element paramount to the reduction of purchase response time is for the manager who is held responsible for that process to have absolute control over the resources involved in the process. In this case, the ICD Director has three managers controlling the process, each of whom have differing levels of concern with the procurement cycle. The Purchase Officer is wholly concerned with the process whereas the Customer Services Officer has relatively little interest in the process because the procurement interface comprises but a small portion of the responsibilities of CSD. Discussions with Technical Division personnel indicated that Technical's involvement with the process is much greater than that of CSD's but they approach their responsibilities to Purchase in a detached manner since it is maintained as a separate division.

To overcome this problem, a consolidation of the pertinent groups should take place. The functions performed by the Document Preparation Section of CSD and the Technical Division in direct support of the PD should be consolidated within Purchase Division as a single cohesive group. This

allows for the whole of the purchase processing cycle to be under the management of the single most interested person, the Purchase Officer.

The fact that virtually all of the processing of a purchase request is a manual operation compared to the almost total computerization of requisitions with FSNs (i.e., Uniform Automated Data Processing System - UADPS) supports this consolidation. The remainder of CSD can then concentrate on requisition processing that interfaces with UADPS; Technical Division will be guided more by the manager of the process it primarily supports and the Purchase Officer is free to manage all the elements that lead up to a completed contract.

The consolidation of these three units into one, in itself, does not cause an immediate reduction in response time, It does however, give the Purchase Officer, the opportunity to exercise his management skills over the whole NSC purchase process toward that end, an effort he has to coordinate through others to accomplish today. In the case of the NSC investigated, CSD and Technical Division are located on one floor of the Center while the Purchase Division is located on another. The effectiveness of the consolidation would be further enhanced if the resulting Purchase unit were physically located together.

2. Minor Organizational Change

Another organizational shift, this change involving only one person, is appropriate as a result of the investigation

conducted. Presently in the Document Preparation Section of the Customer Services Division there is a function being performed which should be performed in Technical Division.

Certain FSN requisitions input to the NSC are "rejected" by the computer because of a not-in-stock (NIS) or not-carried (NC) condition of the MSIR and are forwarded to the Requirements Division of the ICD for disposition. Requirements Division personnel review these requisitions and identify some of these "rejected" requisitions to be obtained through local procurement action. These FSN procurement action requisitions are then forwarded to the Document Preparation Branch of CSD where the first function performed on them is to obtain and annotate on the requisition (or purchase information sheet) the descriptive data and price of the item ordered. This function is performed so that the appropriate buyer of the material has sufficient information to affect a buy.

It is more appropriate to have this function performed in Technical Division where like work is performed, rather than in Customer Services. The publications utilized in support of this function are located in both the Technical and Customer Services Divisions. A minor percentage (1%) of the requisitions processed through this function are sent to Technical Division because insufficient descriptive or price data is found by the clerk. According to the clerk, this is the only function she performs.

Accordingly, this function and the clerk performing the function should be transferred to Technical Division. It is anticipated that such a transfer will result in the following:

a. Eliminate need for a set of stock number reference books;

b. Combine like functions;

c. Allow Technical Division to utilize this research clerk to perform related functions as workload permits (i.e., perhaps more fully utilize clerk).

There is no immediate significant savings, either in dollars or time with this consideration. Rather, it serves only to combine identical functions and provide a more direct route of processing a requisition that fits this category. Approximately 1,050 requisitions a month are input to this function.

B. EFFICIENCY OF CURRENT PROCESSING TECHNIQUES

1. Technical Division Screening Procedure

The screening function in Technical Division could be made more comprehensive in an effort to send a greater proportion of the requisitions destined for Purchase Division direct to that division without being subjected to a technician's research. The gains of a successful effort in this regard would result in a savings of processing time for those requisitions processed direct to Purchase and a simultaneous decrease in Technical Division's workload. The

comprehensive screening referred to herein is envisioned to be accomplished in either one or both of the following ways.

a. Include both technicians and buyers as part of the screening function, simultaneously providing them with screening criteria for a more comprehensive screening effort. It is then anticipated that the additional screening criteria and the experience of the new screeners would result in a significant increase in the proportion of requisitions being forwarded directly to Purchase. It is noted here that Technical Division management feels that too many (at least four) technicians would be required for this effort due primarily to the complexity and number of commodities ordered by the NSC customers. Purchase Division management feels that a buyer would not be able to enhance the screening process as defined above. Both of these views are based on their years of experience in this field. Though the idea may not seem attractive, perhaps it should not be abandoned completely, but kept in mind for future investigation.

b. Provide the screening function with a dollar criteria as part of the screening process. For example, all requisitions estimated (by the customer) to cost less than X dollars will be sent to Purchase Division, the remainder will continue in the screening process and through the remainder of the Technical Division process. It is anticipated that the X dollar amount could be directly related to the current cost of processing a requisition through Technical Division. Again it is felt that this additional

criteria, if and when applied, would result in a greater proportion of requisitions being processed directly to Purchase Division. The success of this type of criteria would be dependent upon the reliability of the customers' estimate.

Both Technical and Purchase Division management felt this suggestion had merit, hence it was pursued. Effort was expended to define and quantify the reliability of the customers' estimate and that effort is described in the next section titled Data Collection.

a. Data Collection

During the course of examining procedures and discussing the procurement process with Center personnel the analyst was made aware of a rarely used section of the Armed Services Procurement Regulations (ASPR). ASPR reads in part, .."All purchase requests involving estimated expenditures of $50.00 or more for items centrally managed at inventory control points will be appropriately annotated with a statement to the effect that Department of Defense-wide review of assets has been initiated or completed, as appropriate, in compliance with the Defense Utilizations Manual (DSAM 4140.1).."[4]

This paragraph was interpreted by several procurement management personnel, to mean that it is not prohibited for a procurement agency to purchase material that

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[4]ASPR, Chapter I, Part 3, Paragraph 1-302.1.

may be assigned an FSN provided that the purchase request does not require material costing $50.00 or more. This interpretation was agreed upon by NRPO management personnel. The immediate reaction to this discovery was to wonder if the regulation were exercised fully, would it cause a significant reduction in the purchase procurement time.

Paragraph C5b of this chapter discussed the need to collect data to check the reliability of the customer's estimate. Coupling the $50.00 consideration with that requirement, the Purchase Officer was requested to obtain the data and so as not to have an adverse effect on Purchase Division's workload, only 1243 purchase orders were sampled. The sample, upon review, was representative except that there were very few Issue Group I (priorities 1, 2 and 3) requisitions included. This was due to an oversight in selecting the sample. This does not prejudice the results other than to disallow statistically strong conclusions concerning IG I requisitions. Otherwise the sample is considered representative.

The Purchase Officer and his assistants selected blocks of purchase orders (blocked by buyer) that would represent all types of commodities purchased. The blocks were chosen randomly from among the files of completed purchase orders. The sample size of 1243 purchase orders (requisitions) can be expressed as:

9.2% of one month's non-standard requisition input to the NSC, or

2.3% of four month's non-standard requisition input to the NSC, or

0.8% of one year's non-standard requisition input to the NSC.

The sample size is statistically adequate as can be verified by reviewing any statistical text.

The data items extracted from these purchase orders included:

1. Purchase order number;
2. Class and group of material ordered;
3. Material cognizance;
4. Requisition priority;
5. Customers' estimated cost (for total order of requisition);
6. Actual purchase price;
7. Quantity of item ordered by requisitioner;
8. Quantity of item purchased if different from quantity ordered;
9. Customers' Unit Identification Code (UIC).

The specific data collected can be obtained through the Operations Research Curriculum Office of the Naval Postgraduate School. The statistics gleaned from the data collected are summarized in Figures 9 through 12. The purchase orders were grouped into several categories, as can be seen in each of the figures. The customer's estimate (obtained from the original requisition) is investigated in Figures 9 and 10. For each category identified, the cumulative percentage of purchase orders with an estimate between $0 and $50, $0 and $100, and $0 and $250 is shown. The

CATEGORY	NUMBER OF PURCHASE ORDERS	PERCENTAGE OF TOTAL = 1243(%)	PERCENTAGE OF NUMBER OF PURCHASE ORDERS (%)		
			$0-50	$0-100	$0-250
Priority 2	3	0.2	0	33.3	66.7
" 3	6	0.5	33.3	33.3	100.0
" 5	475	38.2	71.8	81.1	88.4
" 6	174	14.0	59.2	68.4	84.5
" 7	11	0.9	54.5	54.5	81.8
" 8	6	0.5	66.7	66.7	100.0
" 9	33	2.7	54.5	69.7	81.8
" 10	37	3.0	35.1	48.6	78.4
" 12	259	20.8	69.9	81.9	94.2
" 13	212	17.1	59.4	74.1	85.4
" 14	18	1.4	38.9	55.6	83.3
" 15	9	0.7	66.7	66.7	88.9
		100.0			
Issue Groups					
I	9	0.7	22.2	33.3	88.9
II	666	53.6	68.0	77.0	87.2
III	568	45.7	61.8	75.0	88.7
		100.0			
9 C Cog	489	39.3	62.2	73.4	84.7
9 G "	406	32.7	59.4	71.9	85.2
		72.0			
A11	1243	100.0	64.8	75.8	87.9

STATISTICS OF CUSTOMER'S ESTIMATE
TAKEN FROM SAMPLE OF PURCHASE ORDERS

(Cases of Customers' Estimate Missing Included in Figures)

Figure 9.

CATEGORY	NUMBER OF PURCHASE ORDERS	PERCENTAGE OF TOTAL = 1048%	PERCENTAGE OF NUMBER OF PURCHASE ORDERS (%)		
			$0-50	$0-100	$0-250
Priority 2	3	0.3	0	33.3	66.7
" 3	5	0.5	20.0	20.0	100.0
" 5	372	35.5	64.0	75.8	85.2
" 6	153	14.6	53.6	64.1	82.4
" 7	8	0.8	37.5	37.5	75.0
" 8	4	0.4	50.0	50.0	100.0
" 9	28	2.7	46.4	64.3	78.6
" 10	34	3.2	29.4	44.1	76.5
" 12	215	20.5	63.7	78.1	93.0
" 13	201	19.2	57.2	72.6	84.6
" 14	16	1.5	31.3	50.0	81.3
" 15	8	0.8	62.5	62.5	87.5
		100.0			
Issue Groups					
I	8	0.8	12.5	25.0	87.5
II	537	51.2	60.3	71.5	84.2
III	502	48.0	56.8	71.7	87.3
		100.0			
9 C Cog	445	42.5	58.4	70.8	85.4
9 G Cog	368	35.1	55.2	69.0	83.7
All	1048	100.0	58.3	71.3	85.7

STATISTICS OF CUSTOMER'S ESTIMATE
TAKEN FROM SAMPLE OF PURCHASE ORDERS

(Cases of Customer's Estimate Missing not Included in Figures)

Figure 10.

CATEGORY	NUMBER OF PURCHASE ORDERS	PERCENTAGE OF TOTAL = 1243 (%)	PERCENTAGE NUMBER OF PURCHASE ORDERS (%)			MEAN DIFFERENCE
			$0-50	$0-100	$0-250	
Priority 2	3	0.2	0	33.3	33.3	- 42.25
" 3	6	0.5	33.3	33.3	100.0	6.07
" 5	475	38.2	56.8	72.0	86.5	- 28.16
" 6	174	14.0	43.7	60.3	77.6	- 39.01
" 7	11	0.9	27.3	54.5	81.8	23.69
" 8	6	0.5	66.7	66.7	83.3	- 33.60
" 9	33	2.7	45.5	63.6	81.8	30.07
" 10	37	3.0	32.4	48.6	75.7	5.20
" 12	259	20.8	56.4	74.1	93.4	- 24.36
" 13	212	17.1	48.6	68.4	82.5	- 12.22
" 14	18	1.4	27.8	61.1	83.3	- 2.46
" 15	9	0.7	66.7	66.7	88.9	12.57
		100.0				
Issue Group I	9	0.7	22.2	33.3	77.8	- 10.04
" II	666	53.6	52.9	68.5	83.9	- 29.97
" III	568	45.7	50.5	69.2	87.1	- 13.46
		100.0				
9 C Cog	489	39.3	50.7	67.7	84.9	- 11.08
9 G Cog	406	32.7	52.2	68.0	84.0	- 11.73
		72.0				
A11	1243	100.0	51.6	68.5	85.4	- 22.28

STATISTICS OF ACTUAL PURCHASE PRICE TAKEN FROM SAMPLE OF PURCHASE ORDERS

(Cases of Customer's Estimate Missing Included in Figures)

Figure 11.

CATEGORY	NUMBER OF PURCHASE ORDERS	PERCENTAGE OF TOTAL = 1048 (%)	PERCENTAGE NUMBER OF PURCHASE ORDERS (%)			MEAN DIFFERENCE
			$0-50	$0-100	$0-250	
Priority 2	3	0.3	0	33.3	33.3	- 42.25
" 3	5	0.5	20.0	20.0	100.0	8.88
" 5	372	35.5	57.0	71.5	86.0	- 3.95
" 6	153	14.6	43.8	71.2	78.4	- 9.46
" 7	8	0.8	12.5	37.5	75.0	45.78
" 8	4	0.4	50.0	50.0	75.0	- 34.15
" 9	28	2.7	39.3	57.1	78.6	39.35
" 10	34	3.2	29.4	44.1	73.5	8.93
" 12	215	20.5	55.8	74.0	92.6	- 16.81
" 13	201	19.2	48.3	68.2	82.6	- 6.38
" 14	16	1.5	31.3	56.3	81.3	5.27
" 15	8	0.8	62.5	62.5	87.5	19.46
		100.0				
Issue Group I	8	0.8	12.5	25.0	75.0	- 10.29
" II	537	51.2	52.3	67.6	83.4	- 4.73
" III	502	48.0	49.4	67.9	86.1	- 6.48
		100.0				
9 C Cog	445	42.5	50.1	67.4	84.9	- 0.34
9 G Cog	368	35.1	51.6	67.4	81.5	0.96
		77.1				
All	1048	100.0	50.7	67.5	84.6	- 5.61
Customer's Estimate = $0	195		56.4	75.9	89.2	-111.90

STATISTICS OF ACTUAL PURCHASE PRICE TAKEN FROM SAMPLE OF PURCHASE ORDERS
(Cases of Customer's Estimate Missing Not Included in Figures)

Figure 12.

figures in each of these columns mean that the cited percentage of requisitions of that category had a customers estimate in that dollar range. In Figure 9, those requisitions that contained no customer estimate are included, whereas these requisitions have been removed for comparison purposes and the statistics again presented in Figure 10.

The actual purchase price and the mean (or average) difference figure between the customer's estimate and the actual purchase price are presented in a like manner in Figures 11 and 12. A minus sign in the mean difference column indicates that, for that category of requisition, the amount cited is the average amount of money that the various customers underestimated. Stated differently, if the actual purchase price exceeded the customer's estimate, on the average, then a minus sign will appear in the Mean Difference column. Conversely, if no minus sign appears, then on the average, the customer's estimate was greater than the actual purchase price for that category.

Included in Figure 12 is the same statistical spread for the 195 requisitions (16%) of the original 1243, that did not contain a customer's estimate.

As can be seen, regardless of the statistical spread used, at least 58.3% (Figure 10) of all the purchase requests received by the NSC contain a customer's estimate of $50 or less and after purchase action is completed, 50.7% (Figure 12) of the purchase request input, in fact, costs $50 or less. Thus if a dollar criteria of $50 were chosen as a decision point for sending requisitions directly to the

Purchase Division instead of through the Technical Division, at least 50% of the requisitions input to the purchase cycle would bypass Technical thus saving an average of eight days in processing time. Simultaneously, Technical's load would be lightened significantly, hence by reallocating technicians' assignments, more time savings could be realized. Statistics for evaluating a dollar criteria of $100 and $250 are also shown should this principle be extended.

The only difficulty foreseen here is that the supply demand data for those requisitions that may have been identified with an FSN is lost as a result of this procedure. However, this procedure effects only 17% of Technical's current input and it is most likely that these lost demands would be spread over a very large population of stock items thus lessening the impact of lost demand. A management decision is required to weigh the gains of a significantly reduced response time versus some lost supply demand data. Nevertheless the lost demand situation should be investigated further to determine the degree of its significance.

2. Requisition Status File (RSF)

The RSF is an integral feature of UADPS. It is a file maintained on a computer that records the receipt, original data and disposition of each requisition processed by the NSC. The file is intended to provide an up-to-date status of any requisition received by the Center.

However, the establishment of a RSF record for a non-FSN requisition presently occurs in the processing cycle

after Technical Division and Document Preparation Section, Customer Services Division have completed their processing actions. Hence, the initial update of the RSF occurs several days after the requisition has been received by the NSC.

Often a customer will either follow-up or wish to upgrade the priority of his requisition during the period between NSC's initial receipt and the establishment of a RSF record for that requisition. The initial effort to locate the requisition is in the form of an inquiry into the RSF with a resultant reply of "no locate". Further efforts to locate the requisition are varied, however the researcher is never sure that NSC has ever received the requisition. The customer then often decides to cancel the original requisition and resubmit a second requisition for the same material. Due to the complexity of the processing system and the volume of non-standard requisitions processed by NSC, the cancellation is not timely thereby resulting in a duplicate procurement action. Special procedures have been instituted to identify these duplicate transactions, but these procedures wouldn't be necessary if the RSF were updated at the time of NSC's initial receipt of the requisition.

Updating the RSF would provide the NSC with positive information concerning the receipt of a requisition. Secondly, the receipt date shown on the RSF would provide an NSC researcher a bench mark which he could use (with the aid of his knowledge of processing procedures and processing times)

to identify where in the process the requisition would most likely be. The initial gain in updating the RSF early in the process would result in fewer duplicate procurement actions and possibly the need to discontinue the special procedures required to detect duplicate procurement actions.

Non-standard requisitions are readily identified at the initial point of receipt in the NSC. A copy of this type of requisition should be used for updating the RSF thus allowing the original requisition to proceed on. An economical method of obtaining a copy of each requisition needs to be determined to insure that the original requisition is not delayed inordinately.

3. Issue Group I versus Group II and III Processing

Presently, non-FSN requisition processing flow through the NSC is separated into two parts: an Issue Group (IG) I process and an Issue Group (IG) II and III process. This separation is the first step in providing a means of expediting and controlling high priority requisitions through the Center. The process flow is illustrated on the following page.

The significant point of Figure 13 is to emphasize that while IG I requisitions are segregated from IG's II and III in the beginning of the issue process, IG I requisitions are processed in an integrated fashion periodically downstream in the cycle. Specifically, employees in Technical Division and the Document Preparation Section of the Customer Services Division handle all three issue groups,

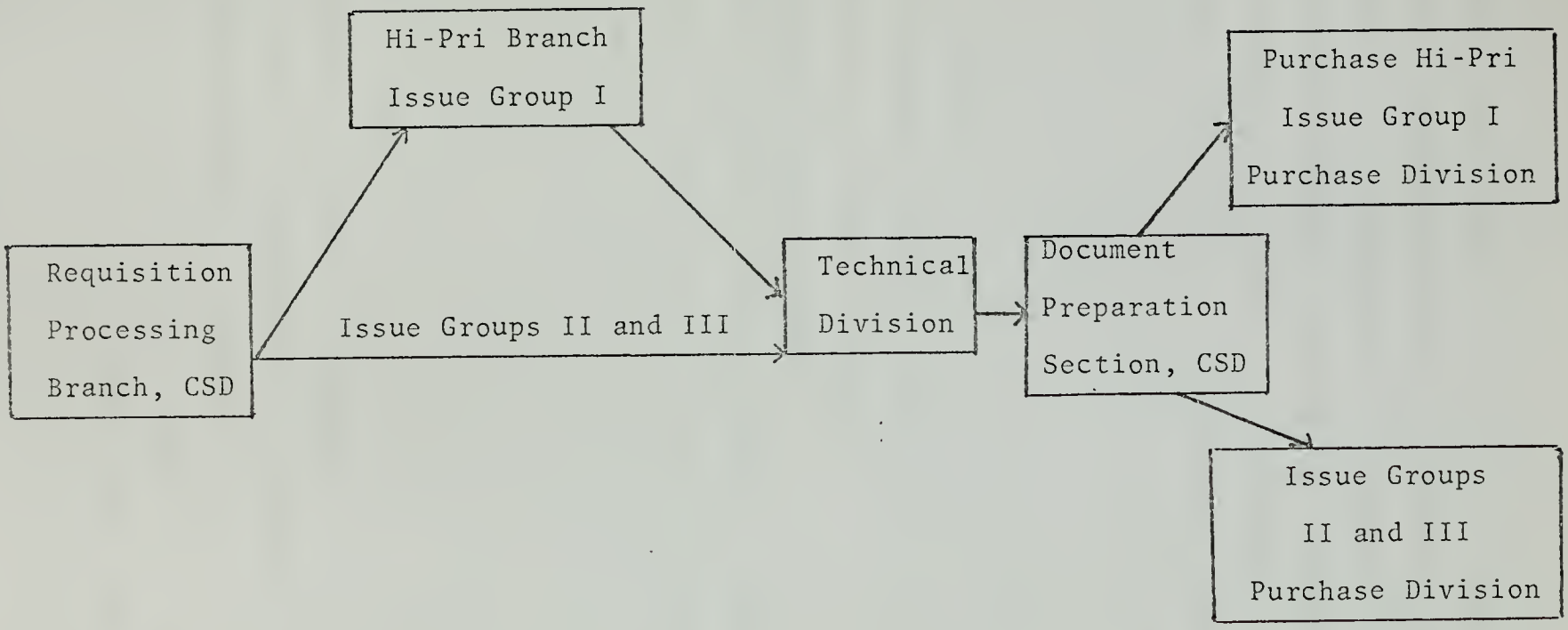

Figure 13. Issue Groups Flow.

thus requiring them to delay processing of Issue Groups II and III requisitions until they have completed processing Issue Group I requisitions. IG I requisitions pass through the process virtually unfettered while IG's II and III requisitions are delayed until the processing of IG I requisitions are finished. The effect of the delay is magnified if the IG's II or III requisitions are held overnight or over the weekend and if the number of delays are many.

The processing of IG I and IG's II and III requisitions should be totally segregated so that IG's II and III requisitions may flow in a continual process even though that process is not expedited as is the IG I process.

4. Name and Address File Procedures

In the DPS of Customer Services Division, a function of one of the clerks is to maintain an up-to-date Name and Address File on the computer. The addresses maintained are primarily "ship to" and mailing addresses of customer requisitioners. During the screening process, the purchase folders are prepared, and "in-the-clear" addresses of the "ship-to" destination and the manufacturer are handwritten onto the Purchase Information Sheet of the requisition so that these addresses can be included on the contract. This is a "pen-and-quill" operation that is time consuming, thus delaying the process.

Investigation into automating (possibly even credit card type maintenance of the file on the clerk's desk) and/or changing the point in the process where this function is performed should be made in an effort to reduce cycle time.

5. Financial Edit

In the DPS there is a necessary function being performed by members of the Financial Editing Section of the Accounting Division which appears to be an inefficient and possibly a misplaced process. All requisitions being processed for eventual purchase action go through a financial edit procedure whereby the appropriate accounting data of the funds to be billed for the purchase action is identified and written out in full. This information is eventually placed on the procurement contract and is utilized by the Navy Regional Finance Center (NRFC) for billing purposes.

Although the financial editor does not, in every case, physically annotate the seven items of data required, he does review each requisition to insure that the data is present and is correct. However, the editor does annotate the seven data items, by hand, on the Purchase Information Sheet in the majority of cases.

Many of the accounting spreads applied are duplicated over and over again since many of the requisitions emanate from the same customers and/or are for the same type material. It would be more efficient to use a rubber stamp or pre-printed purchase information sheets in this process.

The financial edit process be programmed with appropriate table look-up features on a computer. It is not suggested however that this function be reduced to a computer

process and left in the document flow process where it presently exists. To do so would just tend to lengthen the purchase cycle time, not shorten it.

If the financial edit function, as defined here, were to be programmed, a different place in the processing cycle of a purchase requisition should be sought to apply the functions, or if the purchase requisition process itself were more computerized, perhaps this programmed function could be made a subroutine of that process. A third alternative is to provide the NRFC with the programmed function thus enabling the NRFC to perform the function as the first portion of their processing cycle preceeding the billing cycle.

The point here is to highlight the financial edit function, as presently performed, as an area warranting further management investigation in an effort to streamline and improve the purchase response time.

6. Relocation of Prepurchase Functions

Processing requisitions from Technical Division "directly to Purchasing Division" presently means processing through the DPS to Purchase Division. A variety of related administrative and Purchase clerical functions are performed in the DPS. Many of these functions are required because of the NSC's policies or to provide information for inclusion on the forthcoming contract. An example is the providing of a complete accounting spread by the Financial Editors; this data is not required by the buyer, but by the contract.

These processing steps are time consuming and possibly unnecessary in assisting the buyer. It is suggested that serious consideration be given to transferring the point in the processing where these functions are performed to a point after the buyer has made the buy but before the contract is completed. To the degree that this suggestion can be implemented, the purchase processing cycle time will be reduced accordingly (from the customers' point of view). Although shifting the points of where in the process functions are performed doesn't reduce the overall processing time of the cycle, it is anticipated that in many cases the material ordered by the customer will get moving to him earlier by the vendor than is now the case.

C. AREAS IDENTIFIED FOR FURTHER STUDY

During the conduct of the investigation, specific processing areas were found to warrant more thorough investigation than time allowed. Each of these areas should be considered with regard to their potential for further reducing response time or improving efficiency to the process or both.

1. Technical Division Research

The Technical Division research process was reviewed to discover areas in which functions might be made more efficient.

a. There exists two policies, one of the Data Communications community and the other of the Navy Supply community, that conflict. The communications system, though

providing for the automatic communications of requisitions with exception data (trailer cards)encourages its customers to be brief. On the other hand, the technicians in the supply system encourage their customers (same customers as above) to provide as much data as possible on a requisition not carrying a federal stock number, so that full identification of item required is available. Both systems proclaim that compliance with these objectives will speed the customers requirement through to fulfillment. A compromise set of guidelines, satisfying the requirements of both systems should be developed and made available to the NSC's customers for compliance thus providing increased service by both systems.

b. Another conflicting set of policies exist between Inventory Control Points (ICP) and the Technical Division technician. The technician,, in an effort to keep a material request moving desires, after a given amount of research, to pass some requisitions to the ICP's for action. The ICP's on the other hand want to minimize the number of these type transactions actually being sent to the ICP's so as not to delay the requisition any more than necessary and also because the ICP believes that many of the material requirements (of those sent to the ICP) can be identified at the NSC. This conflict results in the NSC technician researching a request "to the bitter end" in an effort to provide "Service to the Customer". It is felt that the depth of research at the NSC is consequently too extensive and takes an inordinate amount of time.

This area should be researched to see what the actual tradeoff of values are between the NSC and the ICP's in an effort to improve upon the length of time it takes for the "system" to fulfill a customer's requirement.

c. A related problem is the defining of what data the technician provides to a requisition and the value of that to the buyer in the Purchase Division who eventually has to buy the material. As stated above, the technician is inclined to research data for a material request until he feels he has found and provided sufficient data for a good buy. However, it doesn't appear that the buyer's actual requirements and the technicians offerings have been matched to see if they coincide. It is presumed, by the extremely small volume of requests by Purchase Division buyers for additional technical data, that the technicians are providing enough data. However, the question comes to mind, "Are the technicians routinely providing too much data?" In other words, can the amount of information sought and provided by the research technicians be reduced without adversely affecting the buyers' ability to effect a contract? If the answer to the latter question is that the technicians are providing more than the required data, then perhaps time of requisition processing could be reduced by requiring the technicians to provide less but adequate data.

This is an area that should be pursued as one in which efficiency might be increased resulting in better purchase cycle processing time.

2. Automated Purchase

Those persons interested in the Purchase processing cycle at the NSC have made reference to the fact that the cycle should be automated -- should be made an integral part of UADPS. Unfortunately, at present, the entire cycle is not appropriate to be placed on a computer. The two specific portions that are not are the Technical Division screening and the actual buying transaction performed in Purchase Division.

It is possible to automate most of the other functions performed during the cycle, i.e., the DLSC screen, providing descriptive data (as performed in Document Preparation, Customer Services Division), providing the buyers code, providing the in-the-clear address of the manufacturer and the "ship to" address, the financial edit, and even the contract printing.

However, most of these functions rely on banks (or files) of data that are quite large and their combined file space in a computer system would require a significant amount of additional equipment. The computer state-of-the-art for information to be stored in massive amounts without requiring a significant number of devices and fast access to this information in memory/file devices has not been yet attained at reasonable costs to make such an effort feasible.

One would have to conclude that automating the procurement cycle to the maximum extent possible, is possible but not feasible.

3. Buyer - Contractor Efficiency

Another area of some significance concerns the telephone lines available to each buyer. In an effort to obtain quotations or bids on different purchase actions, each buyer makes outgoing calls the majority of the day. Often the potential contractor must call back to the buyer after the initial call to provide the quotation requested. However, each buyer has only one telephone, hence the contractor undoubtedly finds a buyer's telephone line busy a significant amount of time and hence elects to transmit his bid information via mail, thus causing another couple of days delay on the average, in consumating the contract.

Two possible alternatives seem viable in overcoming this delay.

a. Install one (1) or more tape recorder answering machines for accepting contractors' calls and recording bids independent of the buyer, or

b. Install a rotary telephone system for three or four buyers whereby an incoming call, upon encountering a busy line would step to the next line in the system, and so on, until all lines were found busy. In addition to the installation of this system, if an extra line were provided to the three or four buyers on a given system, the ability of a caller to get through would be greatly enhanced.

Purchase Division personnel stated that suggestion a. above has been tried in the past and that potential contractors did not take advantage of the service. Also this

fraught with technical problems (i.e., couldn't understand what was on tape due to garbled transmission, etc.). In light of this experience, it is suggested that b. above, if found economically feasible, be implemented.

IV. SUMMARY OF RECOMMENDATIONS

As a result of the findings and analysis presented in the previous chapter the following specific recommendations are offered.

1. That the Document Preparation Section of the Customer Services Division and the Technical Division be consolidated into the Purchase Division.

2. That the function of "data screen", now performed by the Document Preparation Section of the Customer Services Division by performed by the Technical Division.

3. That Customer Services Division utilize a copy of the incoming non-standard requisitions to update the Requisition Status File when the requisition is initially received by the Naval Supply Center.

4. That the processing of high priority requisitions (Issue Group I) be modified so as not to adversely prejudice the processing of Issue Group II and III requisitions.

5. That a more efficient means be found to apply the full accounting spread to the purchase request.

6. That a more efficient means be found to apply the in-the-clear "ship to" address and in-the-clear manufacturers address to the purchase request.

7. That the DLSC screen function in Technical Division be discontinued if the Center does not significantly better identify FSN's with the additional 2.5 million part numbers to be added to the DLSC screen.

8. That a dollar criteria be established to determine whether or not a requisition should be sent initially to Technical or Purchase Divisions. It is further recommended that the minimum value be set at $50.00 or greater.

9. That the "areas for further study" be pursued by qualified analysts under the direction of NSC management.

If the recommendations stated here are successfully implemented at the Naval Supply Center, Oakland, it is felt that Procurement Response Time at that Center will be reduced as much as 30%. Figure 2 (in part) of Chapter II, shown here as Figure 14, reflects the most likely revised response times resulting from implementation of the recommendations cited.

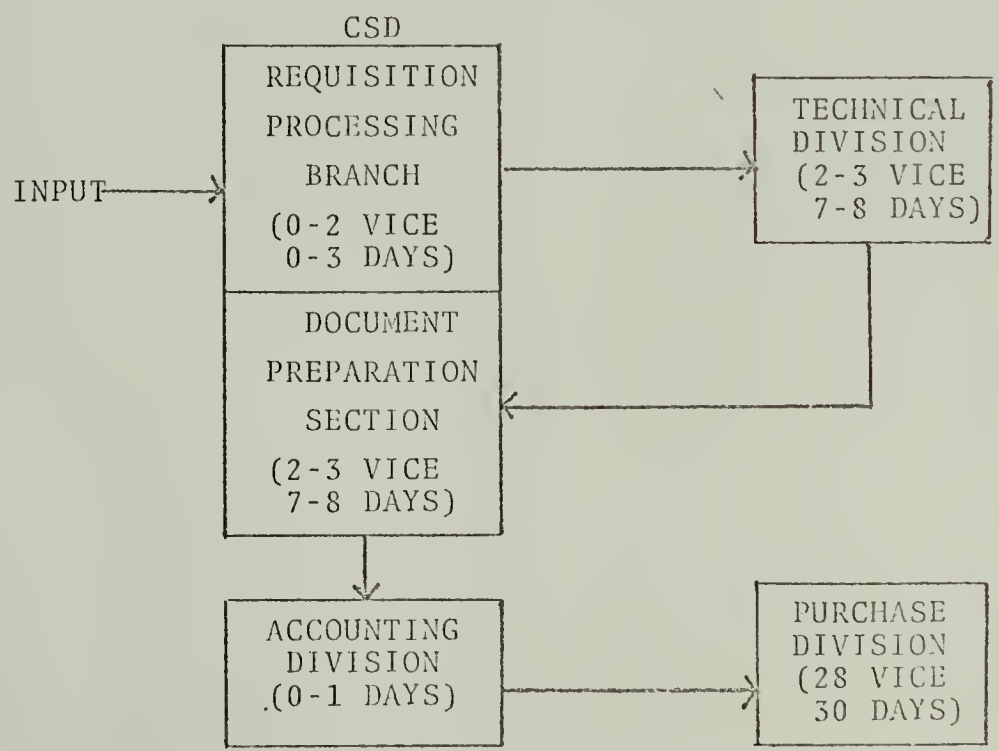

Figure 14. Processing Paths for "Small Purchase" Requisitions.

Recommendations 1 and 8 will have the most significant effect in reducing Procurement Response Time and they form the foundation of the revised purchase cycle model developed here.

Due to the basic similarities in processing of requisitions, particularly non-standard requisitions, at all the Naval Supply Centers, there is reason to believe that this revised purchase cycle model is applicable to all Naval Supply Centers. If investigated and installed, it would reduce procurement response time throughout the Naval Supply System.

V. COMMENTS IN RETROSPECT

The information used for development of this thesis was gathered primarily during the period of November and December 1973. Personnel involved in the purchase cycle at NSC, Oakland, have been contacted since that time and have reported that several of the recommendations cited herein, including recommendations 1 and 8, have been implemented at the Center. As of May 1974, prepurchase processing alone has been reduced from an average of eighteen (18) days to an average of seven (7) days. Further, NSC personnel expect the attainment of even greater time savings. This initial reduction of 11 days is a reduction of 24% of the procurement response time experienced prior to this investigation, a figure that lends credence to the 30% figure cited in the conclusion of this thesis.

PURCHASE INFORMATION SHEET
12ND NSC 4295/6 (REV. 11-72)

APPENDIX A

ROUTE SLIP FOR PRI 9-15	
ROUTE	ORGANIZATION
1	CUSTOMER SERVICES CODE 105
2	TECHNICAL CODE 103
	VALIDATION & CORRECTION SECTION CODE 105.14
	TECHNICAL CODE 103
	DOCUMENT PREPARATION/CONTROL SECTION CODE 105.15
	SAFFM CODE 100.2
	FINANCIAL INVENTORY AND EDIT CODE 55.33
	PURCHASE INPUT CODE 104

BUYER'S CODE

MANUFACTURER

ADDRESS *(Street)*

CITY

STATE | ZIP CODE

APPROPRIATION

OBJECT CLASS

BUREAU CONTROL NO.

AUTHORIZING ACCOUNTING ACTIVITY

TRANSPORTATION TYPE

PROPERTY ACCOUNTING ACTIVITY

COST CODE

ESTIMATED UNIT PRICE
$

PUBLISHED PRICE

MANUFACTURERS CODE | COMPANY | DATE OF [illegible]

PART #

STOCK #

NOUN NAME

FSG & FSC | COG

A.P.L. NO.

ADDITIONAL INFORMATION

CONSIGNEE'S CODE

CONSIGNEE

FPO

LOC

☐ NO ZAR

CLASS
(CHECK AS APPLICABLE)

☐ 250 NO ZLA REQUIRED ☐ ZLA NON-CLASS *(Stock Repl)*

☐ ZLA 206 ☐ ZLA 208 ☐ ZLA 214 ☐ ZLA 220

NAVY FUND CODE

ORIGINAL FUND CODE

LABOR CLASS

WORK CENTER

DELIVERY CODE

ESTIMATED VALUE $

REMARKS

Previous issues may be used until supply is exhausted.

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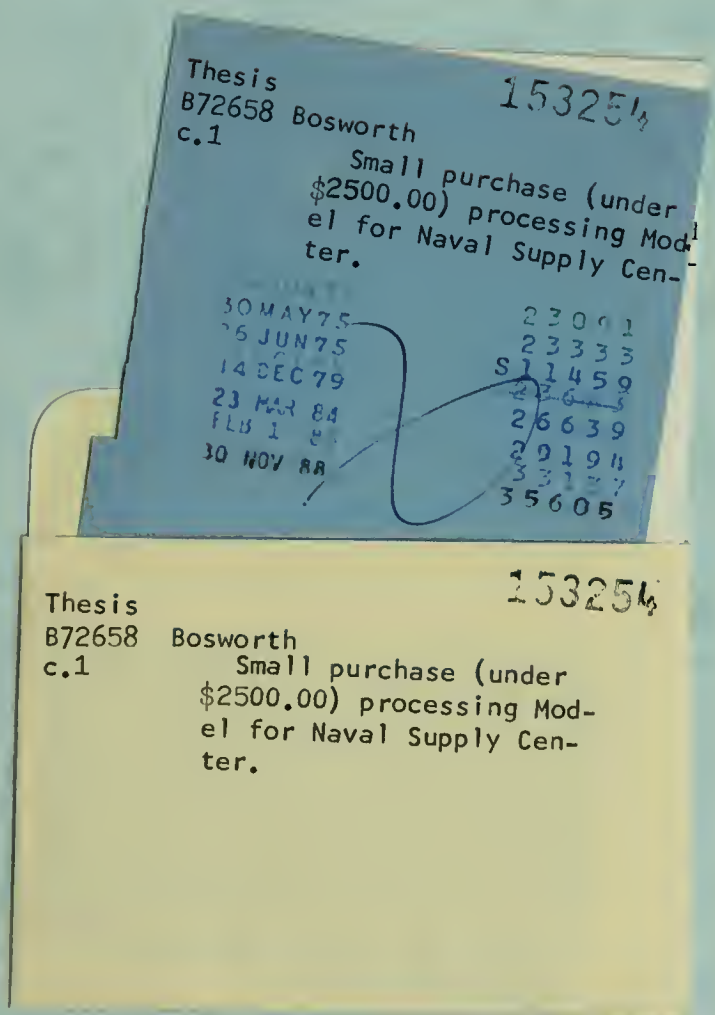

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